

IN THE CLAIMS

Please amend the claims as indicated by status and revisions marks:

1. (CURRENTLY AMENDED) A method comprising:
 - controlling a transition of a power supply from providing a first supply level toward providing a second supply level for a device, wherein the device is a subscriber line interface circuit (SLIC); and
 - dynamically controlling a value of at least one power supply controller parameter during the transition to control the transition toward the second supply level, wherein the power supply utilizes more than one switching frequency to provide the first supply level, the transition, and the second supply level.
2. (PREVIOUSLY PRESENTED) The method of claim 1, wherein the transition is controlled in accordance with whether the second supply level satisfies one or more of one or more pre-determined conditions.
3. (PREVIOUSLY PRESENTED) The method of claim 2, wherein the transition is controlled in response to a pre-determined change in operation states of the electronic device.
4. (PREVIOUSLY PRESENTED) The method of claim 2, wherein the transition is controlled in accordance with whether a difference between the first and second supply levels satisfies one or more thresholds.
5. (PREVIOUSLY PRESENTED) The method of claim 2, wherein the transition is controlled in accordance with a relationship between the second supply level and one or more supply level ranges.

6. (PREVIOUSLY PRESENTED) The method of claim 1, wherein a value of the at least one power supply controller parameter is controlled based on one or more operating parameters of the electronic device.
7. (PREVIOUSLY PRESENTED) The method of claim 6, wherein the dynamically controlling comprises controlling the value of one or more power supply controller parameters based on a power supply level.
8. (PREVIOUSLY PRESENTED) The method of claim 6, wherein a value of the at least one power supply controller parameter is controlled based on an operation state of the electronic device.
9. (PREVIOUSLY PRESENTED) The method of claim 6, wherein a value of the at least one power supply controller parameter is controlled based on a supply level range.
10. (PREVIOUSLY PRESENTED) The method of claim 1, wherein the parameter is at least one of a control system loop filter compensator setting, a modulator setting, a digital-to-analog converter setting, and an analog-to-digital setting.
11. (CURRENTLY AMENDED) An electronic device comprising:
 - a supply level controller coupled to control a variable power supply to supply power at a supply level for the electronic device, wherein the electronic device is a subscriber line interface circuit (SLIC);
 - a transition-to-target controller coupled to control the supply level controller to control the variable power supply to supply power at approximately a first supply level for the electronic device and to control a transition of the power from approximately the first supply level toward a second supply level prior to controlling the variable power supply to supply power at approximately the second supply level for the electronic device; and

a controller parameter(s) controller coupled to control one or more power supply controller parameters for the supply level controller dynamically during the transition from the first supply level toward the second supply level, wherein the variable power supply utilizes more than one switching frequency to provide the first supply level, the transition, and the second supply level.

12. (PREVIOUSLY PRESENTED) The electronic device of claim 11, wherein the transition-to-target controller detects whether the second supply level satisfies one or more of one or more predetermined conditions.

13. (PREVIOUSLY PRESENTED) The electronic device of claim 12, wherein the transition-to-target controller comprises circuitry to identify that the power for the electronic device is to transition to the second supply level in response to a change between operation states of the electronic device.

14. (PREVIOUSLY PRESENTED) The electronic device of claim 12, wherein the transition-to-target controller comprises circuitry to detect whether a difference between the first and second supply levels satisfies one or more thresholds.

15. (PREVIOUSLY PRESENTED) The electronic device of claim 12, wherein the transition-to-target controller comprises circuitry to detect whether the transition is controlled in accordance with a relationship between the second supply level and one or more supply level ranges.

16. (PREVIOUSLY PRESENTED) The electronic device of claim 11, wherein the controller parameter(s) controller controls a value of one or more power supply controller parameters based on one or more operating parameters of the electronic device.

17. (PREVIOUSLY PRESENTED) The electronic device of claim 16, wherein the controller parameter(s) controller comprises circuitry to control one or more power supply controller parameters based on a power supply level.
18. (PREVIOUSLY PRESENTED) The electronic device of claim 16, wherein the controller parameter(s) controller controls a value of one or more power supply controller parameters based on an operation state of the electronic device.
19. (PREVIOUSLY PRESENTED) The electronic device of claim 16, wherein the controller parameter(s) controller controls a value of one or more power supply controller parameters based on a supply level range.
20. (PREVIOUSLY PRESENTED) The electronic device of claim 11, wherein the supply level controller comprises a modulator and wherein the controller parameter(s) controller comprises circuitry to control one or more settings for the modulator.
21. (PREVIOUSLY PRESENTED) The electronic device of claim 11, wherein the supply level controller comprises a loop filter and wherein the controller parameter(s) controller comprises circuitry to control one or more compensator settings for the loop filter.
22. (PREVIOUSLY PRESENTED) The electronic device of claim 11, wherein the supply level controller comprises an analog-to-digital converter (ADC) and wherein the controller parameter(s) controller comprises circuitry to control one or more settings for the ADC.
23. (PREVIOUSLY PRESENTED) The electronic device of claim 11, wherein the supply level controller comprises a digital-to-analog converter (DAC) and

wherein the controller parameter(s) controller comprises circuitry to control one or more settings for the DAC.

24. (CURRENTLY AMENDED) An apparatus comprising:

means for controlling a variable power supply to supply power at approximately a first supply level for an electronic device, wherein the electronic device is a subscriber line interface circuit (SLIC);

means for controlling the variable power supply to control a transition of the power from approximately the first supply level toward a second supply level prior to controlling the variable power supply to supply power at approximately the second supply level for the electronic device; and

means for dynamically controlling a value of one or more power supply controller parameters during the transition, wherein the variable power supply utilizes more than one switching frequency to provide the first supply level, the transition, and the second supply level.

25. (PREVIOUSLY PRESENTED) The apparatus of claim 24, wherein the electronic device performs one or more BORSCHT functions.